REMARKS

In a prior restriction requirement, the Office restricted the claims into three groups. Applicants elected to pursue claims 172-197, which are currently pending. Each of the issues raised in the present Office Action mailed June 26, 2008 is addressed in turn below.

The Cited Prior Art

The Office Action maintains rejections of the claims as being either anticipated or obvious in view of Kacian (U.S. 5,399,491), Kurn (20020058270), Ginsberg, and Diegelman. For anticipation and obviousness, the Office is required to find one, or a collection of references, that describe each and every element of the claims. In the case of anticipation, a single reference must describe each of the elements. In the case of obviousness, the elements may derive from multiple references, but still must all be present.

None of the cited references, alone or in combination, teach or suggest all of the elements of the present claims. Each of the cited references only employs a double-stranded promoter sequence and does not teach or suggested the single-stranded sequences claimed. Applicants noted this in the prior response. The Office Action addresses this by stating:

> Kacian teaches joining a single . . . stranded polynucleotide comprising a promoter to a single stranded . . . DNA comprising a target (see e.g., column 4, line 34 to column 5, line 19 and col. 13 and entire patent). Kurn et al also meets this limitation (see e.g., see entire patent especially paragraphs 0318-0322). (Office Action, page 5)

For clarity, the promoters of the claims are single-stranded when incubated with the RNA polymerase—a polymerase that is capable of transcribing from a single-stranded promoter. For example, step (f) of claim 172 recites that the RNA polymerase (defined in step (a) as being one that can transcribe RNA using a single-stranded promoter) is incubated with a single-stranded transcription substrate to synthesize the transcription product. These elements are entirely lacking from any of the cited references. The promoters in the cited references are double-stranded when transcribed. There is no teaching or suggestion in the cited references that a single-stranded transcription system could or should be used, that one exists, or that one would work or find use in any particular method. The description in Kacian involves formation of a

double-stranded promoter prior to its transcription. The same is true of Kurn—a double-stranded promoter is used for the transcription.

This distinction is called out in the Background section of the present application:

> Most DNA-dependent RNA polymerases read double-stranded DNA, limiting RNA synthesis to systems in which a double-stranded DNA template is available. The synthesis of RNA using single-stranded DNA is not as common. All of the methods referenced above for making probes for gene expression profiling or for amplifying and detecting one or more target nucleic acid sequences require, at a minimum, the use of a double-stranded transcription promoter, and in most cases, also require the use of a double-stranded DNA as a template. Synthesizing RNA using a single-stranded DNA template immobilized on a solid support is described in U.S. Pat. No. 5,700,667, but transcription of the single-stranded template still required formation of a double-stranded promoter region for binding of the RNA polymerase.
>
> In contrast to the methods in the art, the present invention provides methods, compositions and kits for transcription of target nucleic acid sequences using RNA polymerases that bind single-stranded DNA promoters and read single-stranded DNA templates.

Kacian and Kurn also fall into the category of references that utilize double-stranded promoter for transcription.

In view of the above, Applicants request that the rejections be withdrawn.

CONCLUSION

Should the Examiner believe that a telephone interview would aid in the prosecution of this application, Applicants encourage the Examiner to call the undersigned at 608-218-6900.

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